

REMARKS

This amendment is submitted prior to the first examination and action of the United States Patent and Trademark Office. The claims pending in this application are amended claims 1, 2, 6, 7, 21 and 25 and newly added claims 26-29.

Independent claims 1, 2, 6, 7 and 28 presented herein are similar to independent claim 27 which was finally rejected in the parent application, US Serial No. 09/021,085, except that the group of radionuclides recited in claim 27 of the parent application have been broken down into specific groups of radionuclides in independent claims 1, 6, 7, and 28 of the subject application, and independent claims 1, 6, 7 and 28 of the subject application also recite the specific formula for a zinc finger peptide, as recited on Page 6, line 5 of the Specification.

In the Final Office Action in the parent application dated July 31, 2000, the Examiner rejected claim 27 under 35 U.S.C. 103(a) over Zamora in view of Sunderman. As such rejection applies to the claims of the subject application, Applicant maintains that Zamora does not teach a compound having a tertiary structure such that it can bind to a mammalian nucleic acid, as Zamora only teaches a metal-ion binding domain of two residues which simply forms a linear structure (which cannot bind nucleic acid). A zinc finger metal-ion binding domain is a unique, tertiary structure in which **four** residues

participate in binding to the metal ion, and it is such tertiary structure that is able to bind mammalian nucleic acid. However, claims 1, 6, 7, and 28 of the subject application recite a specific structure for the zinc finger peptide, and the peptides of Zamora do not fit the formula recited by the claims of the subject application. Therefore, Applicant respectfully submits that Zamora cannot be combined with any other reference to teach the inventive concepts recited by the claims of the subject application.

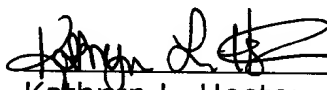
Claim 27 of the parent application was also rejected under 35 U.S.C. 103(a) over Sunderman in view of Sharma and Sharma in view of Sunderman. As discussed during a telephone interview on January 24, 2001 with the Examiner and Applicant's agents Christopher Corbett and Kathryn Hester, Applicant believes that Sunderman is defective and is faulty science in that Sunderman discloses the substitution of ^{109}Cd or ^{60}Co for zinc in a zinc finger and administration thereof to a cancer patient, and administration of such radionuclides to a patient would not only result in death of the patient but also others in close proximity. Sharma, on the other hand, only teaches a laundry-list of metal-binding peptides and metals which could bind thereto, but does not teach substitution of metals other than the metal which normally binds to such metal-binding peptides, that is, Sharma does not teach substituting other metals for zinc in a zinc finger peptide. In addition, the claims of the subject application require that the complex have a tertiary structure that enables the

complex to bind to nucleic acid, and Sharma does not teach reconstitution of an ability of the metal-binding peptides, that is, substituting a metal for zinc in a zinc finger peptide and retaining the activity of the zinc finger, i.e., DNA-binding ability.

Therefore, it is Applicant's belief that the inventive concept recited in the claims, as amended, are patentable over the art of record in the parent application and that such claims are necessary to afford Applicant with the degree of patent protection to which Applicant is entitled by law.

Should the Examiner have any questions or comments concerning the before-mentioned amendments to the application or any other matter, Applicant's agent will welcome the opportunity to discuss same with the Examiner.

Respectfully submitted,



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